DATE: 01/26/2001

```
PATENT APPLICATION: US/09/234,208B
                                                                 TIME: 16:22:43
                       Input Set : A:\Pto.amc
                      Output Set: N:\CRF3\01262001\I234208B.raw
                       SEQUENCE LISTING
       2 (1) GENERAL INFORMATION:
              (i) APPLICANT: Doherty, Joni Kristin, Gail M. Clinton, and John P. Adelman
       6
             (ii) TITLE OF INVENTION: HER-2 BINDING ANTAGONISTS
       8
            (iii) NUMBER OF SEQUENCES: 9
      10
             (iv) CORRESPONDENCE ADDRESS:
                   (A) ADDRESSEE: DAVIS WRIGHT TREMAINE LLP
      11
                   (B) STREET: 1501 Fourth Avenue, 2600 Century Square
      12
      13
                   (C) CITY: Seattle
      14
                   (D) STATE: Washington
      15
                   (E) COUNTRY: U.S.A.
                   (F) ZIP: 98101
      16
      18
              (V) COMPUTER READABLE FORM:
      19
                   (A) MEDIUM TYPE: Floppy disk
      20
                   (B) COMPUTER: PC compatible
      21
                   (C) OPERATING SYSTEM: Windows95
      22
                   (D) SOFTWARE: Word
             (vi) CURRENT APPLICATION DATA:
      24
C--> 25
                   (A) APPLICATION NUMBER: US/09/234,208B
C--> 26
                   (B) FILING DATE: 20-Jan-1999
     2.7
                   (C) CLASSIFICATION:
     29
           (viii) ATTORNEY/AGENT INFORMATION:
     30
                   (A) NAME: Davison, Barry L.
     31
                   (B) REGISTRATION NUMBER: P47,309
     32
                   (C) REFERENCE/DOCKET NUMBER: 49321-1
     34
             (ix) TELECOMMUNICATION INFORMATION:
     35
                   (A) TELEPHONE: 206 628-7621
     36
                   (B) TELEFAX: 206 628-7699
     38
        (2) INFORMATION FOR SEQ ID NO: 1:
     40
              (i) SEQUENCE CHARACTERISTICS:
     41
                   (A) LENGTH: 79
     42
                   (B) TYPE: amino acid
     43
                   (C) STRANDEDNESS: single
     44
                  (D) TOPOLOGY: unknown
            (ii) MOLECULE TYPE: HER-2 ECD antagonist
W--> 45
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
     46
     48 Gly Thr His Ser Leu Leu Pro Arg Pro Ala Ala Val Pro Val Pro Leu
     49
                          5
                                             10
     50 Arg Met Gln Pro Gly Pro Ala His Pro Val Leu Ser Phe Leu Arg Pro
                    20
                                         25
     52 Ser Trp Asp Leu Val Ser Ala Phe Tyr Ser Leu Pro Leu Ala Pro Leu
     53
                35
                                     40
     54 Ser Pro Thr Ser Val Pro Ile Ser Pro Val Ser Val Gly Arg Gly Pro
            50
     56 Asp Pro Asp Ala His Val Ala Val Asn Leu Ser Arg Tyr Glu Gly
     59 (2) INFORMATION FOR SEQ ID NO: 2:
```

RAW SEQUENCE LISTING

RAW SEQUENCE LISTING DATE: 01/26/2001 PATENT APPLICATION: US/09/234,208B TIME: 16:22:43

Input Set : A:\Pto.amc
Output Set: N:\CRF3\01262001\I234208B.raw-

```
61
        (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 419
             (B) TYPE: amino acid
             (C) STRANDEDNESS: single
 65
             (D) TOPOLOGY: unknown
        (ii) MOLECULE TYPE: polypeptide
 66
 67
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
 69 Met Glu Leu Ala Ala Leu Cys Arg Trp Gly Leu Leu Leu Ala Leu Leu
                   5
                                       10
 71 Pro Pro Gly Ala Ala Ser Thr Gln Val Cys Thr Gly Thr Asp Met Lys
               20
                                   25
 73 Leu Arg Leu Pro Ala Ser Pro Glu Thr His Leu Asp Met Leu Arg His
                               40
 75 Leu Tyr Gln Gly Cys Gln Val Val Gln Gly Asn Leu Glu Leu Thr Tyr
                           55
 77 Leu Pro Thr Asn Ala Ser Leu Ser Phe Leu Gln Asp Ile Gln Glu Val
                      70
79 Gln Gly Tyr Val Leu Ile Ala His Asn Gln Val Arg Gln Val Pro Leu
                  85
                                      90
81 Gln Arg Leu Arg Ile Val Arg Gly Thr Gln Leu Phe Glu Asp Asn Tyr
      100
                                  105
                                                     110
83 Ala Leu Ala Val Leu Asp Asn Gly Asp Pro Leu Asn Asn Thr Thr Pro
                              120
85 Val Thr Gly Ala Ser Pro Gly Gly Leu Arg Glu Leu Gln Leu Arg Ser
     130
                           135
                                              140
87 Leu Thr Glu Ile Leu Lys Gly Gly Val Leu Ile Gln Arg Asn Pro Gln
                      150
                                          155
89 Leu Cys Tyr Gln Asp Thr Ile Leu Trp Lys Asp Ile Phe His Lys Asn
                   165
                                      170
                                                          175
91 Asn Gln Leu Ala Leu Thr Leu Ile Asp Thr Asn Arg Ser Arg Ala Cys
             180
                                  185
                                                      190
93 His Pro Cys Ser Pro Met Cys Lys Gly Ser Arg Cys Trp Gly Glu Ser
         195
                              200
95 Ser Glu Asp Cys Gln Ser Leu Thr Arg Thr Val Cys Ala Gly Gly Cys
96 210
                          215
                                              220
97 Ala Arg Cys Lys Gly Pro Leu Pro Thr Asp Cys Cys His Glu Gln Cys
                       230
                                          235
99 Ala Ala Gly Cys Thr Gly Pro Lys His Ser Asp Cys Leu Ala Cys Leu
                   245
                                       250
101 His Phe Asn His Ser Gly Ile Cys Glu Leu His Cys Pro Ala Leu Val
                                   265
103 Thr Tyr Asn Thr Asp Thr Phe Glu Ser Met Pro Asn Pro Glu Gly Arg
104 275
                               280
                                                  285
105 Tyr Thr Phe Gly Ala Ser Cys Val Thr Ala Cys Pro Tyr Asn Tyr Leu
                   295
107 Ser Thr Asp Val Gly Ser Cys Thr Leu Val Cys Pro Leu His Asn Gln
                       310
                                          315
109 Glu Val Thr Ala Glu Asp Gly Thr Gln Arg Cys Glu Lys Cys Ser Lys
                   325
```

```
DATE: 01/26/2001
                       PATENT APPLICATION: US/09/234,208B
                                                                 TIME: 16:22:43
                       Input Set : A:\Pto.amc
                       Output Set: N:\CRF3\01262001\1234208B.raw
      111 Pro Cys Ala Arg Gly Thr His Ser Leu Leu Pro Arg Pro Ala Ala Val
                       340
      113 Pro Val Pro Leu Arg Met Gln Pro Gly Pro Ala His Pro Val Leu Ser
      114
                                       360
                                                            365
      115 Phe Leu Arg Pro Ser Trp Asp Leu Val Ser Ala Phe Tyr Ser Leu Pro
              370
                                   375
                                                        380
      117 Leu Ala Pro Leu Ser Pro Thr Ser Val Pro Ile Ser Pro Val Ser Val
      118 385
                               390
                                                    395
      119 Gly Arg Gly Pro Asp Pro Asp Ala His Val Ala Val Asn Leu Ser Arg
      120
                           405
                                               410
      121 Tyr Glu Gly
      123 (2) INFORMATION FOR SEQ ID NO: 3:
      125
               (i) SEQUENCE CHARACTERISTICS:
      126
                     (A) LENGTH: 19
      127
                    (B) TYPE: nucleic acid
      128
                    (C) STRANDEDNESS: single
      129
                    (D) TOPOLOGY: unknown
 W--> 130
              (ii) MOLECULE TYPE: oligonucleotide
      131
              (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
           TGAGCACCAT GGAGCTGGC 19
      135 (2) INFORMATION FOR SEQ ID NO: 4:
      137
               (i) SEQUENCE CHARACTERISTICS:
      138
                    (A) LENGTH: 22
      139
                    (B) TYPE: nucleic acid
      140
                    (C) STRANDEDNESS: single
      141
                    (D) TOPOLOGY: unknown
W--> 142
              (ii) MOLECULE TYPE: oligonucleotide
              (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
     143
     145 TCCGGCAGAA ATGCCAGGCT CC 22
     147 (2) INFORMATION FOR SEQ ID NO: 5:
     148
               (i) SEQUENCE CHARACTERISTICS:
     149
                    (A) LENGTH: 22
     150
                    (B) TYPE: nucleic acid
     151
                    (C) STRANDEDNESS: single
     152
                    (D) TOPOLOGY: unknown
W--> 153
              (ii) MOLECULE TYPE: oligonucleotide
     154
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
     156 AACACAGCGG TGTGAGAAGT GC 22
     158 (2) INFORMATION FOR SEQ ID NO: 6:
     160
               (i) SEQUENCE CHARACTERISTICS:
     161
                    (A) LENGTH: 21
     162
                    (B) TYPE: nucleic acid
     163
                   (C) STRANDEDNESS: single
     164
                   (D) TOPOLOGY: unknown
W--> 165
             (ii) MOLECULE TYPE: oligonucleotide
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
     168 ATACCGGGAC AGGTCAACAG C 21
     170 (2) INFORMATION FOR SEQ ID NO: 7:
     171
              (i) SEQUENCE CHARACTERISTICS:
```

RAW SEQUENCE LISTING

1

```
DATE: 01/26/2001
                      PATENT APPLICATION: US/09/234,208B
                                                               TIME: 16:22:43
                      Input Set : A:\Pto.amc
                      Output Set: N:\CRF3\01262001\I234208B.raw
      172
                    (A) LENGTH: 20
      173
                    (B) TYPE: nucleic acid
     174
                    (C) STRANDEDNESS: single
     175
                    (D) TOPOLOGY: unknown
W--> 176
              (ii) MOLECULE TYPE: oligonucleotide
     177
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
     179 TCTGGGTACC CACTCACTGC 20
     181 (2) INFORMATION FOR SEQ ID NO: 8:
              (i) SEQUENCE CHARACTERISTICS:
     182
     183
                    (A) LENGTH: 22
     184
                   (B) TYPE: nucleic acid
     185
                   (C) STRANDEDNESS: single
     186
                   (D) TOPOLOGY: unknown
W--> 187
             (ii) MOLECULE TYPE: oligonucleotide
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
     188
     190 TTCACACTGG CACGTCCAGA CC 22
     192 (2) INFORMATION FOR SEQ ID NO: 9:
              (i) SEQUENCE CHARACTERISTICS:
     194
                   (A) LENGTH: 27
     195
                   (B) TYPE: nucleic acid
     196
                   (C) STRANDEDNESS: single
     197
                   (D) TOPOLOGY: unknown
W--> 198
             (ii) MOLECULE TYPE: oligonucleotide
     199
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
     201 GCACGGATCC ATAGCAGACT GAGGAGG 27
```

RAW SEQUENCE LISTING

VERIFICATION SUMMARYDATE: 01/26/2001PATENT APPLICATION: US/09/234,208BTIME: 16:22:44

Input Set : A:\Pto.amc

Output Set: N:\CRF3\01262001\I234208B.raw

L:25 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:26 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:45 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=1
L:130 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=3
L:142 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=3
L:153 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=5
L:165 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=6
L:176 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=7
L:187 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=8
L:198 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=8

1642

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/234,208B

DATE: 01/19/2001 TIME: 15:04:12

Does Not Comply Corrected Diskette Needec

Input Set : A:\ES.txt
Output Set: N:\CRF3\01192001\1234208B.raw

```
SEQUENCE LISTING
      2 (1) GENERAL INFORMATION:
             (i) APPLICANT: Doherty, Joni Kristin, Gail M. Clinton, and John P. Adelman
             (ii) TITLE OF INVENTION: HER-2 BINDING ANTAGONISTS
            (iii) NUMBER OF SEQUENCES: 9
     10
            (iv) CORRESPONDENCE ADDRESS:
                   (A) ADDRESSEE: DAVIS WRIGHT TREMAINE LLP
     11
     12
                  (B) STREET: 1501 Fourth Avenue, 2600 Century Square
                  (C) CITY: Seattle
     1.4
                  (D) STATE: Washington
     15
                   (E) COUNTRY: U.S.A.
     16
                   (F) ZIP: 98101
             (V) COMPUTER READABLE FORM:
     1.8
     1.9
                  (A) MEDIUM TYPE: Floppy disk
                  (B) COMPUTER: PC compatible
     21
                  (C) OPERATING SYSTEM: Windows95
     22
                  (D) SOFTWARE: Word
     24
            (vi) CURRENT APPLICATION DATA:
C--> 25
                 (A) APPLICATION NUMBER: US/09/234,208B
C--> 26
                  (B) FILING DATE: 20-Jan-1999
     27
                  (C) CLASSIFICATION:
     29
          (Viii) ATTORNEY/AGENT INFORMATION:
     30
                  (A) NAME: Davison, Barry L.
     31
                  (B) REGISTRATION NUMBER: P47,309
    32
                  (C) REFERENCE/DOCKET NUMBER: 49321-1
     3.1
            (ix) TELECOMMUNICATION INFORMATION:
     35
                  (A) TELEPHONE: 206 628-7621
    36
                  (B) TELEFAX: 206 628-7699
```

ERRORED SEQUENCES

147 (2) INFORMATION FOR SEQ ID NO: 5:
148 (i) SEQUENCE CHARACTERISTICS:
149 (B) TYPE: nucleic acid
150 (C) STRANDEDNESS: single
151 (D) TOPOLOGY: unknown
W--> 152 (ii) MOLECULE TYPE: oligonucleotide
153 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
E--> 155 AACACAGCGG TGTGAGAAGT GC 22

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/234,208B

DATE: 01/19/2001 TIME: 15:04:13

Input Set : A:\ES.txt

Output Set: N:\CRF3\01192001\1234208B.raw

L:25 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:] L:26 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:] L:45 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=1, Value=[HER-2 ECD antagonist] L:130 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=3, Value=[oligonucleotide] L:142 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=4, Value=[oligonucleotide] L:0 M:200 E: Mandatory Header Field missing, Seq 5, [(A) LENGTH:] L:152 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=5, Value=[oligonucleotide] L:155 M:204 E: No. of Bases differ, LENGTH:Input:0 Counted:22 SEQ:5 L:164 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=6, Value=[oligonucleotide] L:170 M:220 C: Keyword misspelled or invalid format, [(A) LENGTH:] L:0 M:200 E: Mandatory Header Field missing, Seq 7, [(B) TYPE:] L:177 M:220 C: Keyword misspelled or invalid format, [(A) LENGTH:] L:0 M:200 E: Mandatory Header Field missing, Seq 8, [(B) TYPE:] L:179 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=8, Value=[oligonucleotide] L:185 M:220 C: Keyword misspelled or invalid format, [(A) LENGTH:] L:0 M:200 E: Mandatory Header Field missing, Seq 9, [(B) TYPE:] L:188 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=9, Value=[oligonucleotide]